

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number
WO 03/082677 A1

(51) International Patent Classification⁷: B65B 35/16,
35/24

(21) International Application Number: PCT/IB03/01205

(22) International Filing Date: 2 April 2003 (02.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
BO2002A000175 3 April 2002 (03.04.2002) IT

(71) Applicant (for all designated States except US): CARLE & MONTANARI S.P.A. [IT/IT]; Via Croce Coperta, 14, I-40128 Bologna (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): FRABETTI, Fabio [IT/IT]; Via A. Testoni, 12, I-40123 Bologna (IT). BARALDI, Luca [IT/IT]; Via C. Varolio, 5, I-40133 Bologna (IT).

(74) Agent: AGAZZANI, Giampaolo; Agazzani & Associati S.r.l., Via Dell'Angelo Custode, 11/6, I-40141 Bologna (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

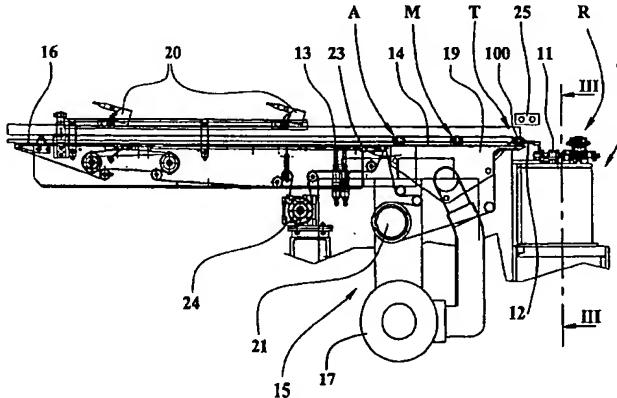
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FEEDING DEVICE OF CHOCOLATES AND SIMILAR PRODUCTS



A1

(57) Abstract: A feeding device of chocolates and similar products (100) for a wrapping machine includes: a first belt means (13), which has a continuous advance motion, supports and moves a plurality of products (100), aligned and arranged in a single line at mutual contact; a second belt means (14) aligned downstream the first belt means (13), having an alternate advance motion and associated to holding means (15) of the product (100); a positioning wheel (9) rotating, facing the second belt means (14) immediately downstream the holding means (15) and having a plurality of angularly equidistant pliers means (11) for gripping the product (100). The second belt means (14) moves the products (100), reciprocally spaced, from a picking condition (A), in which the second belt means (14) receives the product (100) from the first belt means (13), through moving conditions (M), in which the holding means (15) keep each product 15 (100) fixed to the second belt means (14), to a transfer condition (T), in which the second belt means (14) is motionless and the product (100), not constrained thereto anymore, is grasped by a pliers means (11) of the positioning wheel (9), which moves the product (100) with circular motion, from the transfer condition (T) to a release condition (R) in which the wheel (9) is motionless and the pliers means (11) is opened for transferring the product (100) to the wrapping machine.